



DC850 ESD CONDUCTIVE PRIMER

ANTI-STATIC PRIMER

PRODUCT DESCRIPTION: The DC850 ESD Conductive Primer was specifically developed as a base coat for the DC855 ESD Urethane Topcoat. The combination of these two products provides excellent abrasion and chemical resistance, weathering, UV stability and static dissipative properties. The product contains specialized electro-conductive powders which ensure conductive properties remain, regardless of traffic, surface wear, temperature or humidity. Excellent for use in hospitals, computer rooms, laboratories, aircraft hangers, chemical plants, solvent storage areas & chemical areas. Can be used on concrete, cement, brick, masonry or metal.

- SOLIDS BY WEIGHT:** Mixed= 65% (+, - 2%)
- SOLIDS BY VOLUME:** Mixed= 55% (+, - 2%)
- VOLATILE ORGANIC CONTENT:** Mixed = <380 g/l
- STANDARD COLORS:** light gray, medium gray, and tile red
- REQUIRED FILM THICKNESS:** 5-7 mils per coat wet thickness (yields 3 mils dry)
- COVERAGE PER GALLON:** 229 to 320 square feet @ 5-7 mils wet thickness
- PACKAGING INFORMATION** 2 gallon and 10-gallon kits (volume approx.)
- MIX RATIO:** 1 part A to 1 part B by volume
- SHELF LIFE:** 1 year in unopened containers
- FINISH CHARACTERISTICS:** low gloss
- ABRASION RESISTANCE:** Taber abraser CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 23.0 mg loss
- IMPACT RESISTANCE:** Gardner Impact, direct= 50 in. lb. (passed)
- FLEXIBILITY:** No cracks on a 1/8" mandrel
- ADHESION:** 380 psi @ elcometer (concrete failure, no delamination)
- VISCOSITY:** Mixed = 500-1500 cps (typical)
- DOT CLASSIFICATION:** "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"
- APPLICATION TEMPERATURE:** 40-90 degrees F
- TOPCOAT:** DC855 topcoat (one coat only)

CURE SCHEDULE: (70°)	
Pot life (1 gallon volume)	1-3 hours
Tack Free (Dry to Touch)	1-3 hours
Recoat or Topcoat	See limitations
Light Foot Traffic	3-6 hours
Full Cure (Heavy Traffic)	2-7 days

CHEMICAL RESISTANCE	
xylene (With DC855 Topcoat)	D
gasoline	D
50% sodium hydroxide	D
10% sulfuric	D
10% hydrochloric acid	C
20% nitric acid	C
ethylene glycol	D
Rating key: A - not recommended, B - 2 hour term splash spill, C- 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.	

ELECTRICAL RESISTANCE: ASTM F150-89	
MEASUREMENT LOCATION	RESISTANCE (OHMS)
1.	6.03e+5
2.	7.12e+5
3.	8.20e+5
4. (average=6.63e+5 ohms)	5.14e+5

MIXING AND APPLICATION INSTRUCTIONS (DC855 ESD Urethane Topcoat)

THIS PRODUCT IS NOT FOR A CONDUCTIVE COATING SYSTEM. THIS SYSTEM IS NOT INTENDED FOR AREAS EXPOSED TO EXPLOSIVE MEDIA SUCH AS AMMUNITION PLANTS. THIS MATERIAL IS PROVIDED AS A STATIC DISSIPATIVE COATING. REVIEW THE DATA ON THE FRONT SIDE OF THIS TECHNICAL DATA UNDER ELECTRICAL RESISTANCE FOR TESTING RESULTS. REVIEW YOUR ELECTRICAL RESISTANCE REQUIREMENTS BEFORE INSTALLING THIS PRODUCT. DO NOT USE WAXES UNLESS THEY ARE SPECIFICALLY FORMULATED AND RECOMMENDED FOR ANTI-STATIC APPLICATIONS. ALWAYS APPLY TEST PATCHES OF YOUR SELECTION TO CHECK CONDUCTIVITY PRIOR TO APPLICATION AND TO BECOME FAMILIAR WITH THE PRODUCTS APPLICATION PROCEDURE.

PRODUCT STORAGE: Store product in an area so as to bring the material to normal room temperature before using.

SURFACE PREPARATION: Surface preparation will vary according to the type of system to be applied. For a one or two-coat thin build system (3-10 mils dry) we recommend either mechanical scarification or acid etching until a suitable profile is achieved. For a complete system build higher than 10 mils dry, we recommend a fine brush blast (shot blast). All dirt, oil, dust, foreign contaminants must be removed to assure a trouble-free bond to the substrate. A test should be made to determine that the concrete is dry; this can be done by placing a 4'x4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating.

PRODUCT MIXING: Mix one part A to one part B by volume. After the two parts are combined, mix well with slow-speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak-free. Improper mixing may result in product failure. Suitable mixing equipment may be necessary to remix in settled metallic pigment.

PRODUCT APPLICATION: This product is intended for the professional applicator with knowledge of this type of product. The mixed material can be applied by a brush or roller. Maintain temperatures within the recommended ranges during the application and curing process. The DC850 conductive primer is best earthed with strips of copper about 20 centimeters long, which are anchored in the subfloor and connected to a water pipe or neutral conductor in the electric wiring system. Two earthing points normally suffice for a single room. One earth per 200 square meters of floor space is the general rule for large areas. After the substrate is earthed, Apply the DC850 by roller or brush at the recommended (5-7 Mil) thickness. Too thick of an application may result in insufficient conductivity or solvent entrapment and subsequent product failure. Allow sufficient time for the DC850 to cure.

SEE FRONT SIDE UNDER LIMITATIONS FOR TESTING PROCEDURES.

RECOAT OR TOPCOATING: This product was designed to be top coated with our DC855 ESD Urethane Topcoat. When you topcoat this primer, you must first be sure that all of the solvents have evaporated from the coating during the curing process. Always remember that colder temperatures will require more cure time for the primer before recoating or top coating can commence. Before top coating, check the coating to insure no epoxy blushes were developed (a whitish, greasy film or deglossing). If a blush is present, it must be removed prior to top coating. To topcoat with the DC855 thoroughly mix part A and part B together for the DC855 anti-static topcoat using slow speed mixing equipment. Apply the DC855 anti-static topcoat by roller or brush. Be sure to apply the top coat product at the specified coverage rate or recommended thickness. Too thick of an application may result in product failure. We only recommend one coat of any anti-static topcoat be applied over the conductive primer. Adequate leakage resistance should be less than 107 ohms measured at 500 volts over concrete per ASTM F150-89. Typical conductive properties for the DC855 system (when applied in conjunction with DC850 primer) follows: (DC855 = 105 to 109 ohms per ASTM F150-89 at 500 volts over concrete).

CLEANUP: Use xylol.

FLOOR CLEANING: Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.

LIMITATIONS:

- Slab on grade requires moisture barrier.
- Substrate temperature must be 50 F above the dew point.
- All new concrete must be cured for at least 30 days.
- Too thick of an application may result in product failure.
- Do not topcoat the primer until the electrical resistance is 106 ohms of resistance or lower. In some instances, it will require 24 hours to achieve proper conductivity before top coating. (Test before top coating).
- This product is intended for the professional installer that has experience with this type of coating system.
- Physical properties listed on this technical data sheet are typical values and not specifications.

NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY WARNING: Antistatic flooring cannot provide protection against discharges from the power main. If the danger of coming in contact with the mains cannot be completely ruled out, the usual safety regulations must be followed to the letter. Although this publication describes how our products may be applied to achieve antistatic flooring and the information given is based on the present state of our knowledge, all recommendations are made without liability on our part since the actual application of our products is not in our hands and special conditions prevailing at a particular job sight might negatively influence floors antistatic properties. Buyers and users of our products should make their own assessment of the floor's antistatic properties immediately after it has been installed and at regular intervals thereafter. We warrant that our product is manufactured to the strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. All other information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. . Any use or application other than recommended herein is the sole responsibility of the user. **NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT.** We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means

that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may be CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING any material, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.